

REMARKS / DISCUSSION OF ISSUES

The present amendment is submitted in response to the Office Action mailed April 13, 2009. Claims 1-2, 5 and 12-30 remain in this application. The claims in general are amended for one or more non-statutory reasons, for example to correct one or more informalities or obvious errors, remove figure label numbers, remove unnecessary limitations, and/or replace European claim phraseology with U.S. claim language having the same meaning. In view of the remarks to follow, reconsideration and allowance of this application are respectfully requested.

Interview Summary

Applicants appreciate the courtesy granted to Applicant's attorney, Michael A. Scaturro (Reg. No. 51,356), during a telephonic interview conducted on Tuesday, July 14, 2009. During the telephonic interview, a proposed amendment to Claim 1 was submitted and adding independent claims 16 and 28. These proposed amendments were discussed in view of the cited reference, Roth (U.S. Patent No. 5,418,764). The Examiner indicated that a further search would be required to determine the validity of the claims in light of the limitations of the newly amended claims and the new claims presented. Applicant's Attorney further clarified Roth and explained that it does not teach the limitations pertaining to the recitation of "higher precision parameters" as recited in the independent claims. The Examiner indicated that, based on the explanation provided, Roth did not teach the recitations of the newly amended claims and new claims presented.

Rejections under 35 U.S.C. §102(b)

I. Claim 1 and 12-14 are allowable

In the Office Action, Claim 1 stands rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5,418,764 ("Roth"). Claims 3, 6 and 9 have been cancelled without prejudice or disclaimer. Applicants respectfully traverse the remainder of the rejections.

Independent Claim 1 has been amended herein to better define Applicant's invention over Roth. Accordingly, the cited portions of Roth do not anticipate claim 1 because the cited portions of Roth do not teach every element of claim 1. For example, the cited portions of Roth do not disclose or suggest, *"wherein the record carrier comprises parameter information, which parameter information is of a higher precision than the precision of the track pitch mentioned in the pre-defined standardized condition, when expressed in micrometer, is expressed in two decimals, and that the information on the track pitch stored on the record carrier, when expressed in micrometer, is indicated in at least three decimals."* The Office states that column 5, line 40 through column 6, line 63 and Figs. 4 and 5 of Roth discloses this feature. See Office Action, page 2. However, Roth discloses that address codes at certain radial positions on the record carrier (e.g., positions defined by r1 and r3) do not correspond for different record carriers on account of the permissible differences in track pitch and scanning speed in accordance with the CD standard. Roth accounts for this lack of correspondence in the address codes by employing specific auxiliary codes recorded at radial positions r1 and r3 such that the values of the auxiliary codes recorded in the track correspond identically to the absolute time code in the CD signal to be recorded to maintain synchronicity. See Roth, col. 6, lines 30-55. This is further described in greater detail as follows.

Roth describes an information-recording system comprising a record carrier having a preformed recording track which is transversely modulated in accordance with an auxiliary signal which includes equidistantly recorded address codes and auxiliary codes. Each address code indicates the distance, measured in the track direction, between the location where it has been recorded and a specific reference position. The auxiliary codes, which are arranged among said address codes, specify control data for use by the recording system for controlling the recording process. A recording device comprises synchronising circuitry for deriving a clock pulse signal from the auxiliary signal being read, which clock signal is in synchronism with the process of reading the equidistantly recorded address and auxiliary codes, a counter, whose count is controlled by the clock signal, and circuitry responsive to a correctly read address code to reset the count to a value corresponding to such address code. See Roth, Summary. For an optimum use of the address code recorded by means of the track modulation, it is desirable that the values of the address codes recorded in the track

correspond identically to the absolute time code in the CD signal to be recorded, however, variations in the address code occur due to dependence upon track pitch and nominal scanning speed, which may be selected within a range of acceptable values. See Roth, col. 6, lines 5-20. Fig. 5 of Roth illustrates that the address codes at the radial positions defined by r1 and r3 do not correspond for different record carriers on account of the permissible differences in track pitch and scanning speed in accordance with the CD standard. Roth accounts for this lack of correspondence in the address codes by employing specific auxiliary codes recorded at radial positions r1 and r3. See Roth, col. 6, lines 30-55. The radial positions defined by r1 and r3 are determined accurately in Roth by marking the radial positions defined by r1 and r3 with specific auxiliary codes recorded in the track at these radial positions. For a given track pitch and scanning speed, these values (i.e., AVI, AVO) can be pre-calculated and can thus be recorded during recording of the servo track in the mastering process.

Thus, as described in Roth, the lack of correspondence in the address codes due to permissible differences in track pitch and scanning speed are corrected by employing auxiliary codes to be positioned at specific radial positions to assist in synchronizing the recording device during a mastering process and thereby overcome the variations that may occur in the address codes. Applicants respectfully submit that these auxiliary codes represent specifically positioned anchor points on the recording track for the purpose of maintaining synchronicity in the recording process to correct for the afore-mentioned permissible differences in track pitch and scanning speed which result in undesirable variations in the address codes. However, the auxiliary codes of Roth do not represent physical parameters of a higher precision than a physical parameter mentioned in a pre-defined standardized condition. For example, neither the address codes nor the auxiliary codes of Roth represent physical parameters of a higher precision. Accordingly, the cited portions of Roth do not disclose *“wherein the record carrier comprises parameter information, which parameter information is of a higher precision than the precision of the track pitch mentioned in the pre-defined standardized condition, when expressed in micrometer, is expressed in two decimals, and that the information on the track pitch stored on the record carrier, when expressed in micrometer, is indicated in at least three decimals.”* Therefore, claim 1 is allowable.

Claims 2-7, 9 and 10 depend from independent Claim 1 and therefore contains the limitations of Claim 1 and is believed to be in condition for allowance for at least the same reasons given for Claim 1 above. Accordingly, withdrawal of the rejection under 35 U.S.C. §102(b) and allowance of Claims 2-7, 9 and 10 is respectfully requested.

II. Claim 2 is allowable

In the Office Action, Claim 2 stands rejected under 35 U.S.C. §103(a) as being anticipated by Roth and further in view of U.S. Patent No. 5,608,717 ("Ito"). Applicant respectfully traverses the rejection.

As explained above, the cited portions of Roth do not disclose or suggest each and every element of claim 1 from which claim 2 depends. Ito does not disclose each of the elements of claim 1 that are not disclosed by Roth. For example, Ito does not disclose or suggest *"wherein the record carrier comprises parameter information, which parameter information is of a higher precision than the precision of the track pitch mentioned in the pre-defined standardized condition, when expressed in micrometer, is expressed in two decimals, and that the information on the track pitch stored on the record carrier, when expressed in micrometer, is indicated in at least three decimals."*

Ito is directed to a CD-ROM that is provided with an area for forming a

Character/graphic pattern formed in such a way that data, which generate on the CD-ROM two sorts of pit patterns having average reflectance's different from each other to a perceptible extent, are respectively recorded inside and outside the character/graphic pattern. Unless an illegal copy disc is produced by duplicating the legal original disc of the CD-ROM at a very high precision, the character/graphic pattern of the copy disc is invisibly deformed by the discrepancy between the arrangements of the pit patterns of the copy disc and the original disc. The Office cites Ito for disclosing the forming of a character/graphic on a CD-ROM with the assistance of parameter data. The Office refers Applicants to element 14 of Fig. 1 and Col. 10, line 24 through Col. 11, and line 29. Applicants respectfully submit that the cited portions of Ito describe one embodiment in which pit patterns are formed in a

character/graphic region (i.e., a bound of tracks) in accordance with a CAV (constant angular velocity) system in which a rotational velocity of said optical disc is held constant, and the pit patterns formed outside the character/graphic region (i.e., tracks outside of said character/graphic region) are formed in accordance with a CLV (constant linear velocity) system in which a tracking linear velocity of said tracks is held constant. Then, when the copy disc of the CD-ROM is produced simply by the CLV system in order to duplicate the data of the original disc, the character/graphic pattern formed on the original disc of the CLV system by the CAV system is also duplicated by the CLV system. As a result, the character/graphic pattern recorded to be visible by the CAV system is drastically deformed to such an extent as to become invisible and seem nonexistent on the copy disc by the change of a linear velocity. It is respectfully submitted that there is no teaching or disclosure of utilizing higher precision data of any physical parameter(s). Therefore, Ito cannot be said to disclose or suggest *"wherein the record carrier comprises parameter information, which parameter information is of a higher precision than the precision of the track pitch mentioned in the pre-defined standardized condition, when expressed in micrometer, is expressed in two decimals, and that the information on the track pitch stored on the record carrier, when expressed in micrometer, is indicated in at least three decimals."* Therefore, the cited portions of Roth and Ito, separately or in combination, do not disclose each and every element of claim 2. Hence, claim 2 is allowable.

III. Claims 4, 7 and 10

In the Office Action, Claims 4, 7 and 10 stand rejected under 35 U.S.C. §103(a) as being anticipated by Roth and further in view of U.S. Patent No. 5,608,717 ("Ito"). Applicants have cancelled claims 4, 7 and 10 without prejudice or disclaimer.

IV. Claim 5 is allowable

In the Office Action, Claims 5 and 8 stand rejected under 35 U.S.C. §103(a) as being anticipated by Roth and further in view of U.S. Patent Application No. 2002/010588 ("Levich"). Applicant have cancelled claim 8 without prejudice or disclaimer. Applicants respectfully traverse the remaining rejection of claim 5.

As explained above, the cited portions of Roth do not disclose or suggest each and every element of claim 1 from which claim 5 depends. Levich does not disclose each of the elements of claim 1 that are not disclosed by Roth. For example, Levich does not disclose or suggest “*wherein the record carrier comprises parameter information, which parameter information is of a higher precision than the precision of the track pitch mentioned in the pre-defined standardized condition, when expressed in micrometer, is expressed in two decimals, and that the information on the track pitch stored on the record carrier, when expressed in micrometer, is indicated in at least three decimals.*” Levich merely discloses that the standard physical parameters of a track pitch to be 0.74 μm . Therefore, the cited portions of Roth and Levich, separately or in combination, do not disclose each and every element of claim 5. Hence, claim 5 is allowable.

V. Claim 11

In the Office Action, Claim 11 stands rejected under 35 U.S.C. §103(a) as being anticipated by Roth and further in view of U.S. Patent No. 5,608,717 (“Ito”). Applicants have cancelled claim 11 without prejudice or disclaimer.

VI. Claim 15 is allowable

In the Office Action, Claim 15 stands rejected under 35 U.S.C. §103(a) as being anticipated by Roth and further in view of U.S. Patent Application No. 2004/0052202 (“Brolier”). Applicants respectfully traverse the rejection of claim 15.

As explained above, the cited portions of Roth do not disclose or suggest each and every element of claim 1 from which claim 15 depends. Brolier does not disclose each of the elements of claim 1 that are not disclosed by Roth. For example, Brolier does not disclose or suggest “*wherein the record carrier comprises parameter information, which parameter information is of a higher precision than the precision of the track pitch mentioned in the pre-defined standardized condition, when expressed in micrometer, is expressed in two decimals, and that the information on the track pitch stored on the record carrier, when expressed in micrometer, is indicated in at least three decimals.*” Brolier merely discloses that the record carrier comprises a further area comprising an integrated circuit, the parameter information

being stored in the integrated circuit. Therefore, the cited portions of Roth and Brolier, separately or in combination, do not disclose each and every element of claim 15. Hence, claim 15 is allowable.

VII. New Claims 16 – 30 are allowable

New claims 16-30 recite additional elements not disclosed or suggested by the above-cited references.

Claims 16-23 are allowable

For example, independent claim 16 is directed to the specific case where the “physical parameter” is the “channel bit length.” Accordingly, claim 16 incorporates the limitations of cancelled claim 6, which recites that the physical parameter is the channel bit length, together with claim 1. Claim 16 now recites in part, *“Wherein the record carrier comprises parameter information, which parameter information is of a higher precision than the precision of the channel bit length mentioned in the pre-defined standardized condition”*

The Office rejects claim 6 over Roth. *See* Office Action, page 3. The Office states that Roth at Fig. 2 and at col. 4, lines 44-64 teaches that the physical parameter, recited in claim 1, is the channel bit length. However, the above cited portion of Roth teaches that an auxiliary signal is comprised of code signals 12 which alternate with synchronized signals 11. Each code signal 12 may comprise a “biphase-mark” modulated signal having a length of 76 channel bits, which signal is representative of a code word comprising 38 code bits. In the case of a “biphase-mark” modulated signal, each code bit is represented by two successive channel bits. It is respectfully submitted that merely teaching that code signals are comprised of “biphase-mark” modulated signals having a certain length of channel bits is different from storing parameter information of a physical parameter in a **higher precision**. In other words, there is no teaching or suggestion in Roth of utilizing channel bits in a first precision and then storing the channel bits on the record carrier at a higher precision. Accordingly, the cited portion of Roth do not disclose, *“wherein the record carrier comprises parameter information, which parameter information is of a higher precision than the precision of the channel bit length mentioned in the pre-defined standardized condition”*, as recited in new

claim 16.

Therefore, the cited portions of Roth fail to disclose or suggest at least one element of claim 16. Hence, claim 16 is allowable. New claims 17-23 are allowable, at least by virtue of their dependence from claim 16.

Claims 24-30 are allowable

For example, independent claim 24 is directed to the specific case where the “physical parameter” is the “inner radius.” Accordingly, claim 24 incorporates the limitations of cancelled claim 9, which recites that the physical parameter is the inner radius, together with claim 1. Claim 24 now recites in part, “*Wherein the record carrier comprises parameter information, which parameter information is of a higher precision than the precision of the inner radius mentioned in the pre-defined standardized condition.*” [Emphasis Added]

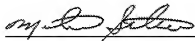
In the Office Action, claim 9 is rejected over Roth. See Office Action, page 3. The Office cites Roth at Fig. 4 and at col. 5, lines 40-60 for teaching that the physical parameter is the inner radius of the record carrier. Applicants respectfully submit that the cited portion of Roth merely teaches well-known information regarding the construction of a standard CD. That is, Roth merely describes that when a standard CD signal is recorded three different areas can be distinguished. These three areas include a program area, a lead-in area and a lead-out area. Each area is bounded by Radii (e.g., r1 and r2 in the lead-in area and a lead-out area bounded by r3 and r4). However, there is no teaching or suggestion of utilizing parameter information of a higher precision. Roth is silent in this regard. Accordingly, the cited portions of Roth do not disclose “*wherein the record carrier comprises parameter information, which parameter information is of a higher precision than the precision of the inner radius mentioned in the pre-defined standardized condition.*” Therefore, claim 24 is allowable. Therefore, the cited portions of Roth fail to disclose or suggest at least one element of claim 24. Hence, claim 24 is allowable. New claims 25-30 are allowable, at least by virtue of their dependence from claim 24.

Conclusion

In view of the foregoing amendments and remarks, it is respectfully submitted that all claims presently pending in the application, namely, Claims 1-2, 5 and 12-30 are believed to be in condition for allowance and patentably distinguishable over the art of record.

If the Examiner should have any questions concerning this communication or feels that an interview would be helpful, the Examiner is requested to call Mike Belk, Esq., Intellectual Property Counsel, Philips Electronics North America, at 914-945-6000.

Respectfully submitted,

A handwritten signature in dark ink, appearing to read "Michael A. Scaturro", is written over a horizontal line.

Michael A. Scaturro
Reg. No. 51,356
Attorney for Applicant

Mailing Address:
Intellectual Property Counsel
Philips Electronics North America Corp.
P.O. Box 3001
345 Scarborough Road
Briarcliff Manor, New York 10510-8001